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10/695,205	10/28/2003	Bennett M. Richard	304-35713-US (D5407-216)	4513

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EXAMINER	
COZART, JERMIE E	
ART UNIT	PAPER NUMBER
3726	
MAIL DATE	DELIVERY MODE
12/30/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/695,205	RICHARD ET AL.	
	Examiner	Art Unit	
	Jermie E. Cozart	3726	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12 August 2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,2,4-7 and 9-15* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *16 and 17* is/are allowed.

6)☒ Claim(s) *1,2,4-7 and 9-15* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *8/12/09*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1, 2, 4-7, and 9-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rudd (US 2004/0003927) in view of Brissette et al. (US 6,698,076 B2).

Regarding **claim 1**, Rudd discloses manufacturing a screen for downhole use wherein a base pipe (14) is inserted into a filter layer (22), and the filter layer (22) is secured to the base pipe (14) by being mechanically coupled (specifically, reducing the diameter of the outer filter layer by plastically deforming the filter layer against the outer surface of the base pipe; pg. 3, paragraph [0051]; pg. 5, paragraph [0072]).

Regarding **claims 2** and **9**, Rudd discloses creating an interference fit (pg. 3, paragraph [0049], lines 6-14) between the base pipe (14) and the filter layer (20).

Regarding **claim 4**, Rudd discloses reducing (pg. 3, paragraph [0049], lines 6-14) the size of the filter layer by first expanding the diameter of the filter layer to a second diameter greater the base pipe outer diameter then allowing the filter layer to return to its original smaller diameter.

Regarding **claim 5**, Rudd discloses accomplishing the securing (pg. 3, paragraph [0049], lines 2-3) the filter layer (22) to the base pipe (14) without welding, adhesive, or mechanical connectors.

Regarding **claim 6**, Rudd discloses inserting the base pipe (14) and filter layer (22) downhole (pg. 4, paragraph [0065], lines 1-3) and expanding (pg. 4, paragraph [0065], lines 6-9; Fig. 3) the base pipe (14) downhole.

Regarding **claim 10**, Rudd discloses manufacturing a screen for downhole use by inserting a base pipe (14) into a filter layer (22), securing (pg. 3, paragraph [0049], lines 2-3) the filter layer (22) to the base pipe (14) without welding, adhesives, or mechanical connectors, thereby creating an interference fit between the base pipe (14) and filter layer (22), installing the base pipe (14) and filter layer downhole (pg. 4, paragraph [0065], lines 1-3), and expanding (pg. 4, paragraph [0065], lines 6-9; Fig. 3) the base pipe (14) downhole.

Regarding **claim 11**, Rudd discloses mounting (pg. 4, paragraph [0067], lines 15-18) an outer tube (18) which is essentially a protective jacket after inserting the base pipe (14).

Regarding **claim 12**, Rudd discloses expanding the base pipe (14) for at least a portion of the length of the filter layer (22) due to running-in a rotary expansion tool along the length of the inner tube (14). *See paragraph [0065] for further clarification.*

Regarding **claim 13**, Rudd discloses expanding the base pipe (14) near the ends of the filter layer (22) due to running-in a rotary expansion tool along the length of the inner tube (14). *See paragraph [0065] for further clarification.*

Regarding **claim 14**, Rudd discloses expanding the base pipe (14) for the entire length of the filter layer (22) and beyond due to running-in a rotary expansion tool along the length of the inner tube (14). *See paragraph [0065] for further clarification.*

Rudd, however, does not disclose securing the filter layer to the base pipe by expanding the base pipe, expanding the base pipe then securing the filter to the base pipe, or mounting a protective jacket to the filter layer before inserting the base pipe.

Brissette discloses securing an outer layer member (14) to an inner layer member (12) by using one of two embodiments: (A) expanding (col. 3, lines 58-61 and FIG. 3; col. 4, lines 15-17 and FIG. 4) the inner layer member (12) into the outer member (14) in order to form an interlocking profile between the members (12, 14), or (B) inserting the inner member (12) within the outer member (14) and then pushing the two members through a die (56; FIG. 5) and mandrel (58) to form an interlocking profile. Brissette thus teaches that it was well known in the art to secure inner and outer tubular members to one another interchangeably by using either expansion of the inner tubular member against the inner surface of the outer tubular member, or compression of the outer tubular member against the outer surface of the inner tubular member.

Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention to expand the base pipe of Rudd to secure the base pipe to the filter layer (rather than reduce the diameter of the outer filter layer to secure it to the base pipe), in light of the teachings of Brissette that outward expansion and inward compression are art-recognized equivalent options for connecting concentric tubular

sections, the selection of either process being well obvious and well within the level of ordinary skill in the art.

At the time the invention was made, it would have been an obvious matter of design choice to a person of ordinary skill in the art to mount a protective jacket to the filter layer before inserting the base pipe because Applicant has not disclosed that mounting a protective jacket to the filter layer before inserting the base pipe provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with mounting the protective jacket to the filter layer after the base pipe is inserted into the filter layer as taught by Layne because the protective jacket is effectively mounted to the filter layer.

Therefore, it would have been an obvious matter of design choice to further modify Rudd to obtain the invention as specified in claim 7.

3. Claims 1, 2, 4, 5, and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Broome et al. (US 6,305,468 B1) in view of Brissette et al. (US 6,698,076 B2).

Regarding **claim 1**, Broome discloses manufacturing a screen for downhole use wherein a base pipe (34) is inserted into a filter layer (20), and the filter layer (20) is secured to the base pipe (34) by passing (col. 3, lines 45-47) the filter layer (20) together with the base pipe (34) through die (32). As the concentric base pipe and filter layer are passed through the die, the filter layer is compressed against the outer surface of the base pipe to secure them to each other.

Regarding **claims 2** and **9**, Broome discloses creating an interference fit (col. 3, line 67 – col. 4, line 1) between the base pipe (34) and the filter layer (20).

Regarding **claim 4**, Broome discloses reducing the size of the filter layer (20) by passing the base pipe (34) along with the filter layer (20) through die (32).

Regarding **claim 5**, Broome discloses accomplishing the securing (col. 3, lines 45-47) the filter layer (20) to the base pipe (34) without welding, adhesive, or mechanical connectors.

Broome, however, does not disclose securing the filter layer to the base pipe by expanding the base pipe.

Brissette discloses securing an outer layer member (14) to an inner layer member (12) by using one of two embodiments: (A) expanding (col. 3, lines 58-61 and FIG. 3; col. 4, lines 15-17 and FIG. 4) the inner layer member (12) into the outer member (14) in order to form an interlocking profile between the members (12, 14), or (B) inserting the inner member (12) within the outer member (14) and then pushing the two members through a die (56; FIG. 5) and mandrel (58) to form an interlocking profile. Brissette thus teaches that it was well known in the art to secure inner and outer tubular members to one another interchangeably by using either expansion of the inner tubular member against the inner surface of the outer tubular member, or compression of the outer tubular member against the outer surface of the inner tubular member.

Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention to expand the base pipe of Broome to secure the base pipe to the filter layer (rather than reduce the diameter of the outer filter layer to secure it to the

base pipe), in light of the teachings of Brissette that outward expansion and inward compression are art-recognized equivalent options for connecting concentric tubular sections, the selection of either process being well obvious and well within the level of ordinary skill in the art.

4. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Layne (1,854,517).

Regarding **claim 15**, Layne discloses inserting a base pipe (10) in a filter layer (20), applying a material (15) to the base pipe (10) to contact the filter layer (20) before the inserting, and applying heat (page 2, lines 66-70) to the filter layer (20) to allow the filter layer (20) and the material (15) to secure the filter layer (10) to the base pipe (10).

Layne, however, does not disclose applying heat to the base pipe.

At the time the invention was made, it would have been an obvious matter of design choice to a person of ordinary skill in the art to apply heat to the base pipe because Applicant has not disclosed that applying heat to the base pipe provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with applying heat to the filter layer as taught by Layne because the filter layer is shrunk fit tight enough upon the base pipe.

Therefore, it would have been an obvious matter of design choice to modify Layne to obtain the invention as specified in claim 15.

Allowable Subject Matter

5. Claims 16 and 17 are allowed.

Response to Arguments

6. Applicant's arguments filed 8/12/09 have been fully considered but they are not persuasive.

Applicants argues with respect to claim 1 that the base pipe is expanded as stated in paragraph 72 of Rudd but that it is done downhole after it is constructed not on the surface to manufacture the screen assembly.

In response, the Examiner states the claim 1 does not require that the expansion be done downhole or above the surface during manufacture. In addition, the preamble of claim 1 is not limiting in that the body of the claim is able to stand alone.

Applicants argue that the method of claim 1 produces a screen without welding.

In response, the Examiner maintains that claim 1 does not specifically state producing a screen without welding, welding could be used as a supplemental means of attachment in addition to an interference fit between two tubular members that overlap one another.

Applicants argue that Brissette is non-analogous art because Brissette is directed to connecting telescoping drive shafts to one another through expansion but leaving a small gap between the inner and outer members.

7. In response to applicant's argument that Brissette is nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this

case, Brissette is directed to joining two tubular members to one another by expanding the inner tubular into an interference fit with the outer tubular, wherein the inner tubular is preventing from rotating with respect to the outer tubular due to the interference fit. Although the tubular members are directed to drive shaft components, the joining of the two tubular members to one another teaches an alternative way of attaching tubular members to one another to achieve an interference fit. In addition, although there is some axial movement with respect to the tubular members, the tubular members are still effectively connected to each other primarily due to the expansion of the inner tubular into intimate contact with the outer tubular member.

Applicants argue that Broome does not teach expanding the base pipe into the filter layer to join them, and that Broome closes the gap to the base pipe with a continuous weld. Applicants also state that Brissette leaves a gap after expanding 12 to the outer tubular 14.

In response, the Examiner acknowledged in the previous Office Action that Broome did not disclose securing the filter layer to the base pipe by expanding the base pipe. The Examiner states that the assembly is done through the members being pushed through the die, and the welding serves as a supplemental means for attachment. In addition, the Examiner states that claim 1 of the claimed invention does not teach removal of an assembly gap with expansion, in fact claim 1 is silent with respect to the elimination of any gap between the pipe and filter layer. Brissette as described in detailed above discloses expanding an inner pipe into intimate contact with an outer pipe so as to join the pipes with one another, although there is a small gap

between the members this does not exclude the teaching of the members being secured to one another through expansion.

Applicants with respect to claim 15 that the ribs of Layne do nothing but provide travel stop for the cooling filter element 20, and that welding creates a serviceable filter assembly.

In response, the Examiner maintains that the ribs (15) which are attached to the base serve to receive the filter layer (20) and attachment point for the outer layer (20). Layne states that "The shrunk grip of the outer wall upon the ribs [15] is sufficient to keep the outer wall [20] from sliding longitudinally under any forces imposed upon the strainer pipe." (pg. 2, lines 76-80.). Layne also states that outer wall/filter layer (20) when shrunk upon the upon the ribs and base pipe becomes an assembled structure, "for all physical purposes, a single integral structure, especially so far as tensile strength and lateral strength are concerned." (pg. 2, lines 72-76.). Therefore, based on the teachings of Layne it is clearly apparent that the material (15) secures the filter layer (20) to the base pipe and thereby anticipates claim 15.

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jermie E. Cozart whose telephone number is 571-272-4528. The examiner can normally be reached on Monday-Thursday, 7:30 am - 6:00 pm.

10. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bryant can be reached on 571-272-4526. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

11. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jermie E Cozart/
Primary Examiner, Art Unit 3726

December 8, 2009